Silene banksia (Caryophyllaceae), an ancient garden plant

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Abstract

Mabberley, David J.(Rijksherbarium, University of Leiden, Netherlands, and Royal Botanic Gardens Sydney, Mrs Macquaries Road, Sydney NSW 2000) 1999. Silene banksia *(Caryophyllaceae), an ancient garden plant.* Telopea *8(2): 249–256.* The history of the group of garden hybrids, synthesized in Europe in the 1850s and known today as *Lychnis* × *haageana*, is discussed. It is concluded that they represent cultivars of a cultigen, ***Silene banksia*** (Meerb.) Mabb., ***comb. nov.***, domesticated in north-east Asia. Within *S. banksia* are arranged plants currently called *Lychnis coronata* (lectotypified here), *L. fulgens*, *L. senno* and *L. sieboldii*. Species of '*Lychnis*' cultivated and naturalized in New South Wales are listed.

Introduction

> '*Lychnis* × *haageana*
>
> The garden hybrid between *Lychnis fulgens* and *L. sieboldii* is a short-lived clump-forming perennial growing to a height of about 18 in (45 cm). In summer it bears clusters of large white, salmon red or scarlet flowers. It is weak growing and needs to be regularly propagated from seed'.
>
> Botanica, *the Illustrated A-Z of over 10,000 garden plants for Australian gardens and how to cultivate them* (1997: 546)

Lychnis is now included in *Silene* (Greuter 1995), so in the second edition of *The Plant-book* (Mabberley 1997: 662), this garden plant, allegedly first synthesized in the 1850s by Ernst Benary in Erfurt, Germany, and now cultivated widely throughout the temperate world, was listed under *Silene*. It appeared there as *L.* × *haageana*, pending work by silenologists, but Werner Greuter (in litt.) has now urged me to publish on this plant in readiness for any future edition.

Investigation of the synthesis of the hybrid has led to an assessment of the status of its parents and thence analysis of the ancient cultigen complex of which they form part. Scrutiny of the botanical and, particularly, the horticultural, literature dealing with the living plants and experiments carried out with them in the last century, and examination of living plants and the (surprisingly small number of) herbarium specimens preserved at BM, K, L, NSW, OXF and P has resulted in the settling on a name in *Silene*, that growers can use for the plants, and the provision of pointers to further research on the origin of the complex.

The synthesis of *Lychnis* × *haageana*

In the nineteenth century, one of the greatest of European nurseries was that of Ernst Benary (Haupt 1908). Benary (1810–1892), born in Kassel, Germany, was trained at the

Erfurt firm of Haage and Schmidt and later worked in nurseries in Belgium and England besides elsewhere in Germany. In 1843 he founded his own firm in Erfurt and, by 1908, it had become one of the most influential in Europe with contracted growers not only in many countries there but even in the tropics. Not only was the business introducing new plants into cultivation (Benary himself was commemorated in the name of a greenhouse plant, *Seemannia benaryi* Regel (i.e. *Gloxinia sylvatica* (Kunth) Wiehler, Gesneriaceae), described from material collected by Benedict Roezl in South America), but the gigantic concern was also dedicated to improving garden stock through hybridization and selection on a grand scale.

In the 1850s, Benary's firm, which specialized in, amongst other things, carnations, pinks and other Caryophyllaceae (in German 'Nelken'), successfully hybridized two campions, then called *Lychnis fulgens*, said to be from Siberia, and *L. sieboldii* from Japan. The resultant plant was named *L. haageana* after Friedrich Adolphe Haage (1796–1866) of the firm of Benary's old employer in Erfurt. It was released to the trade from Erfurt by Benary but also from Ghent (Gand), Belgium at the same time (Lemaire & Verschaffelt 1859). In January 1859, Verschaffelt published a fine illustration of the plant raised at Ghent from Benary's seeds, but if he or Lemaire, who validated the name, preserved any specimen, this is now lost, like the rest of any herbarium either of them may have had.

The hybrid had actually been raised before, probably just before the work at Benary's nursery, by Eduard Ortgies (1829–1916), superintendent of the University botanic garden in Zürich, Switzerland (Mabberley 1985), with *L. sieboldii* as the pollen parent (Ortgies 1860). Moreover, according to K. Koch's *Wochenschrift* (2: 173–4, 1859), the plant had also appeared in French nurserymen's catalogues as '*Lychnis sieboldii-fulgens*', offered as a product of the Lemoine nursery in Nancy. Ortgies's and Benary's hybrids, at least, were identical. Both Benary and Ortgies found that selfing the hybrid produced a range of forms from the '*fulgens*' type with small, red flowers, to the '*sieboldii*' type with larger, white flowers, plants with brick-red and salmon-pink flowers being among the fertile offspring. The hybrids soon became fashionable and were illustrated in periodicals in Britain as early as 1859 according to *Index londinensis*. Now they are grown in all temperate parts of the world, including the cooler parts of Australia, being easily raised from seed as well as cuttings: different forms have been given cultivar names. As pointed out by Planchon (1876), many of the forms have more similarities to '*L. fulgens*' than to *L. sieboldii*, a plant now considered conspecific with *L. coronata* Thunb.

In recent years, the hybrids have been crossed with the gardeners' Maltese Cross, *L. chalcedonica* L., a Russian species notable for its dense heads of scarlet flowers, to give *L* × *arkwrightii* Heydt, a striking cultivar being 'Vesuvius' (Huxley 1992: 137).

The parents

The name of *Lychnis coronata*, which species was introduced to cultivation in England by John Fothergill in 1774 (Aiton 1789), was based on a plant cultivated in Japan, collected and drawn by C.P. Thunberg (Hb. 11163, the basis for his drawing 136 — see below). The conspecific *L. grandiflora* was based on a cultivated specimen grown in Vienna. The basis for *L. sieboldii* Van Houtte ex Planchon was also a cultivated plant, grown in Belgium as imported from Japan by von Siebold for sale as *L. grandiflora* var. *alba*, but renamed by Van Houtte as a new species for commercial release in 1855. While formally describing it as a species, though, Planchon thought it perhaps a selected garden form and perhaps the plant discussed by Engelbert Kaempfer in his *Amoenitatum Exoticarum*: 873 (1712) as '*Sen sjun ra*, vulgo *Gaupi*. Lychnis coronaria,

flore in herbaceum abicante...petalis dentatis, apiculis cinereis. *Eadem* flore albo', included in *L. coronata* by Thunberg. Zuccarini (in Siebold & Zuccarini 1835–41) noted that this flowered in May and June (hence the name 'cut summer gauze' of Steward (1958: 113)).

A second plant described on the same page in Kaempfer's book, 'Literatis & vulgo *Senno*. Lychnis coronaria, foliis calycibus lanuginosis, flore dilutiori sanguineo, petalis laciniatis, apicibus colore violaceo saturatis', which Thunberg had as *L. chalcedonica*, was included in *L. senno* of Siebold & Zuccarini, who noted that it flowered in July and August (therefore the 'cut autumn gauze'of Steward (1958: 113)). It was also described from cultivated plants collected in Japan, where, like *L. coronata* (as *L. grandiflora*), Siebold and Zuccarini (1835-41: 97, t. 48 — 'Colitur frequens in Japoniae hortis') considered it not to be wild but probably introduced from China, having been described by Chinese writers. To *L. senno* Tang (1996) has joined *L. bungeana*, which was collected in a Beijing garden by Bunge and was distributed as seeds by Fischer, from St Petersburg, those received at the Horticultural Society in London in 1835 being the origin of the plant figured by Lindley in the *Botanical Register* (see below). Lindley noted it was 'very like a one-flowered state of L. fulgens', though it was first described as *Agrostemma bungeana* by David Don, based on a plant grown in England from seeds sent from Germany.

Lychnis fulgens, the other parent of *L* × *haageana*, is maintained as distinct from *L. senno* by Tang (1996). *L. fulgens* was originally distributed from the Gorenki garden in Russia, again by Fischer, and a plant raised from seeds in 1819 by Thomas Jenkins in his nursery in New Road, Marylebone, London, was illustrated by Sims in the *Botanical Magazine* (see below). The commonly grown form often has several-flowered heads, unlike the original description of *L. fulgens*, which was based on a plant 'floribus solitariis', grown in the botanic garden in Berlin; *L. fulgens* is said to be native in Siberia, but Tang (1996) records it for China too, with *L. senno* (including *L. bungeana*) also in both.

Quite independent of the work on these Japanese and European cultivated plants, a specimen of *L. coronata* in China was described by the Portuguese missionary-naturalist, João de Loureiro (1717–1791) as *Hedona sinensis*, another name based on a cultivated plant, 'Colitur ob venustatem Cantone Sinarum'. Indeed, the plant had long been grown in China, figuring in 'The Hundred Flowers' of seventeenth-century painters (e.g. Wiedner et al. 1988: Cat. 34) but was accurately depicted much earlier, being drawn by Xu Xi in the Five Dynasties (Tenth Century) as reproduced by She & Yuhas (1973: fig. 4).

Shortly after Loureiro's work, a very similar form with brick-red flowers was described as *Agrostemma banksia* Meerb. (1798), a name based on yet another cultivated plant, this time grown in Leiden, Netherlands, where Nicolaas Meerburg[h] (1734–1814) was curator of the Hortus Botanicus from 1774 until his death. Later, in the nineteenth century, the plant was described afresh, yet again from cultivated material, this time in France (Carrière 1871), from a plant grown from 'oillet' seeds sent by a M. Coullet from Yokohama, Japan in 1867. Of that batch only one seed germinated but, within two seasons of selfing, a whole range of colour forms including white with variously incised petals were produced. While describing it as new, Elie Carrière (1818–1896) admitted it might merely be a robust form of the well known cultivated plant, suggesting that it and *L. haageana* might merely be forms of *'L. grandiflora'* (i.e. *L. coronata*).

Botanical and horticultural solutions

All the binomials in current use for this group are thus ultimately based on cultivated plants, mostly grown away from their presumed native distribution, mainland east Asia. Based on these striking cultivated plants, botanists have insisted on keeping up distinct species (*L. cognata*, '*L. fulgens*', *L. semmo* and *L. coronata* in mainland Asia, and, in Japan, *L. sieboldii* (including *L. speciosa*), '*L. fulgens*', *L. semmo* and *L. coronata* (the last two as cultivated plants from China)), though, dealing with living plants, horticulturists in the last century took a very different view. After his experimental work, Ortgies (1860) concluded that the parents of *L.* × *haageana* were conspecific, confirming an opinion published the year before by K. Koch, commenting on Benary's work (see above). Rohrbach (1869) considered *L. sieboldii* a 'lusus' of *L. fulgens* var. *typica* Regel and *L.* × *haageana* merely an intraspecific cross.

British and French hortculturists, at least, effectively consolidated this, in amalgamating all the cultivated plants as varieties of one species, *L. fulgens*. So, Nicholson's *Illustrated Dictionary of Gardening* (see below) has var. *grandiflora* (i.e. *L. coronata*, syn. *L. grandiflora*), var. *sieboldii* (i.e. *L. sieboldii*) and var. *haageana* (*L.* × *haageana*) while Désiré Bois (1896: 45–46), from his experience in the Jardin des Plantes in Paris, wrote, 'Toutes ces plantes ne different au point de vue scientifique que par des caractères peu emportants et très variables comme le degré de villosité (abondance plus ou moins grande de poils fins et courts), le nombre des fleurs dans les inflorescences, les dimensions des pétales simplement échancrés ou plus ou moins découpés'. Contrary to perceived wisdom, then, it is horticulturists who were recognizing a smaller number of species than botanists were, and still are.

Further research directions

The distribution of *L. coronata* (*L. grandiflora)* has been said to be China and Japan, but I have seen no definitely wild material. If, as Siebold and Zuccarini suggested, the forms seen in Japan were, like so many cultivated Japanese plants, such as chrysanthemums, for example, selected from Chinese plants already cultivated for a long time in China, it might well be that *L. coronata* has a hybrid origin itself. This would certainly explain the extraordinary array of plants produced by some forms after selfing. If this is indeed so, what are the wild plants from which *L. coronata* has been derived? '*L. fulgens*' is morphologically similar to the Chinese *L. laciniata* Maxim. (non Lam. = *L. flos-cuculi* L.), i.e. *L. wilfordii* (Regel) Maxim.(*L. fulgens* var. *wilfordii* Regel, of which Rohrbach (1869: 185) recognized two forms, the wild f. *mandschurica* Rohrb. from mainland Asia and f. *japonica* Rohrb. from cultivation in Japan). Its relationship with *L. coronata* needs to be examined, as does that with what has been called *L. cognata* Maxim. (reduced to a variety of *L. fulgens* by Rohrbach): if such plants represent forms of one parent species, then *L* × *haageana* would merely be a backcross between one distinctive form within the existing hybrid complex and one close to a putative wild parent. However, the possibility of other parent species being involved cannot yet be ruled out and allied wild species in both China and Japan, notably *L. miqueliana* Rohrb., need to be studied with this in mind.

The most parsimonious hypothesis on present evidence is that '*L. fulgens*' in cultivation is that form most like the wild type and that *L. semmo*, true *L. fulgens* and *L. bungeana* are forms nearer it than is *L. coronata*, which includes *Hedona sinensis*, *Agrostemma banksia*, *L. sieboldii* and *L. speciosa*. Nonetheless, this is, as yet, hypothesis and the relationship between all these plants, and even *L* × *arkwrightii* (and therefore *L. chalcedonica* itself), needs clarification through controlled hybridization experiments, preferably using wild-collected material, before a definitive scheme can finally be arrived at.

Silene subg. *Lychnis*

The controversial generic limits in the *Silene–Lychnis* group are resolved at last (see Greuter 1995) and many genera, including *Lychnis* (now subg. *Lychnis* (L.) E. Krause), are finally 'sunk' in *Silene*. *Lychnis fulgens*, one of the supposed parents of the 'hybrid', is now *Silene fulgens* (Sprengel) E. Krause, though, as explained above, the description of the type resembles *L. senno*, so perhaps the 'wild' plant would need another name if it were maintained as a separate species. Although the resolution of the name in *Silene* for it, and any other parent, awaits further work, that for the ancient cultivated plants themselves can be resolved here, giving horticulturists a useable name under which to arrange recognized cultivars.

In dealing with the long-cultivated forms of the plant, the ideology of Ortgies (1860), Nicholson, and Bois in keeping the 'species' together is followed, here by arranging the cultivars in informal groups under the oldest name for any plant in the cultigen complex, and referring *L.* × *haageana* to it as a synonym. The name in *Silene* cannot be based on either *L. coronata* or its synonym, *L. grandiflora*, however, because of existing homonyms; the next available name is *Hedona sinensis* Lour., but this cannot be used either, because of *S. chinensis* Hort. ex Bosse, another but different cultivated species. Dan Nicolson kindly commented (in litt.), 'Since *chinensis* and *sinensis* are listed among the voted examples [in ICBN] of examples of 'epithets so similar that they are likely to be confused', it would seem that one cannot avoid treating them as homonyms under Art. 53.4, even if one has fallen into synonymy. Perhaps I should say that if you were to publish, others would probably feel they would have to treat your new combination as a later homonym and provide a new name'. The oldest useable epithet for the whole complex therefore appears to come from *Agrostemma banksia* Meerb.:

Silene banksia (Meerb.) Mabb., **comb. nova**

Agrostemma banksia Meerb., Pl. Select. Icon. Pict.: [12, as '*Agrostema*'], t. 28 (1798); Schrader, J. Bot. 2: 152 (1799).

Type: cultivated at Leiden, Netherlands, *N. Meerburg* (not preserved?). No material found at L, or in E, where there are Meerburg specimens from Giseke's herbarium (H. Noltie, pers. comm.) so the illustration might serve as iconotype; this falls into the Coronata Group below.

Silene banksia is taken here as the name for the ancient cultivated plant, apparently a cultigen, including all crosses and backcrosses in the complex raised originally in ?China, but later in Japan and Europe; if further work demonstrates that the cultigen has a hybrid origin as suspected above, it would then be written '*Silene* × *banksia*'. The specific epithet commemorates Joseph Banks (1743–1820), who visited the Hortus Botanicus in Leiden in 1773 and had 59 of Kaempfer's drawings of Japanese plants (though not including any of '*Lychnis*'), now at BM, published in 1791: it is orthographically comparable with *Erica banksia* Andr. (Ericaceae) of the same era.

The 'wild' and cultivated plants in the complex can be provisionally arranged in informal groups (in which the botanical names and their types are listed for convenience) as follows. Note that some cultivar names were used in the 'cultivated variety' sense in the last century and were given 'formal' botanical names at the time: they are retained here in modern form to ensure continuity.

a. Silene banksia Senno Group

(Nearest to one putative parental wild type, which probably has multiflowered inflorescences of small red flowers with laciniate petals like *Lychnis wilfordii* (Regel) Maxim. (*L. fulgens* var. *wilfordii* Regel), but plants more compact and inflorescences fewer-flowered.)

Lychnis fulgens Fischer ex Sprengel, Nov. Provent.: 26 (1818); Sims, Bot. Mag.: t. 2104 (1819); Huxley (1992: 137); Tang (1996: 275).
Agrostemma fulgens (Sprengel) Doell, Rhein. Fl.: 643 (1843).
Silene fulgens (Sprengel) E. Krause in Sturm, Fl. Deutschl., ed. 2, 5: 96 (1901).
Type: Cultivated in the Berlin botanic garden, Germany, c. 1817, ? *K. Sprengel* (W?, lost [Sprengel's Caryophyllaceae were in W]). The first description of *L. fulgens* refers to solitary flowers with bifid petals, Sims's plant having flowers always in threes. Later authors have used the name for several-flowered specimens.

Agrostemma bungeana D. Don in Sweet, Fl. Gard. II, 7: t. 317 (before Mar. 1836) & Hort. Belge 3: 106 (Mar. 1836); Drapiez in t.c.: 249, t. 63 (Aug. 1836).
Lychnis bungeana (D. Don) Fischer ex Lindley, Bot. Reg.: t. 1864 (1836).
Type: cultivated in England by Patrick Neill from material received from Messrs Booth's Flotbeck Nurseries, near Hamburg, Germany, n.v. (? not preserved, in which case the plate would be 'iconotype'). Plants raised from seeds from Booth were grown at the Glasgow Botanic Garden where they flowered in September 1835 and one was illustrated in Bot. Mag. t. 3594 (1837), where a footnote indicates that Bunge's original material came from a garden in Beijing. N.B. Extant specimens, without localities, include one ex Herb. Bunge (P!) and 'Lychnis bungeana Fisch. in litt. 1833' ex Herb. Prescot (OXF!): both have flowers in threes.

Lychnis semno Siebold & Zucc., Fl. Jap. 1: 98, t. 49 (1839); Tang (1996: 276).
Type: cultivated in Japan, *P.F. von Siebold* (holo L!).

Apparently none of the cultivars in commerce is named.

b. Silene banksia Coronata Group

(Large flowers with petals shallowly lobed, praemorse to dentate; here falls the type of *S. banksia*. The relationship between this and other *Silene* species needs to be examined as those are perhaps involved in the parentage of the cultivars in this group.)

Named cultivars include:

'Grandiflora' (large red flowers)

Lychnis coronata Thunb. in Murray, Syst. Veg.: 435 (1784) & Nova Acta Soc. Sci. Upsal. 4: 35, 39 (1784) & Fl. Japon.: 187 (1784), Hortus Third: 688 (1976); Huxley, l.c. (1992); Tang (1996: 275), non *Silene coronata* Bonj. ex Colla (1833).
[*Lychnis grandiflora* Jacq. 'Abart' *coronata* Siebert & Voss, Vilmorin's Blumengärtn. ed. 3: 105 (1894), nom. illeg.]
Type: cultivated in Japan, *C.P. Thunberg 11163* (lecto, selected here, UPS — fiche (P) ! (N.B. right hand specimen on sheet is that figured in Thunberg's drawing reproduced in *Thunberg's Drawings of Japanese Plants* (1994): t. 136).

Lychnis grandiflora Jacq., Coll. 1: 149 (Jan–Sept 1787), Ic. Pl. Rar.: t. 84 (?1787).
Exemix grandiflora (Jacq.) Raf., Aut. Bot.: 27 (1840).
Agrostemma grandiflora (Jacq.) Doell, Rhein. Fl.: 643 (1843).
Lychnis fulgens Fischer ex Spreng. var. *grandiflora* (Jacq.) Nichols., Ill. Dict. Gard. 2: 306, t. 488 (1885), nom. illeg.
Lychnis × *haageana* 'Grandiflora', Hortus Third, l.c. (1976); Huxley, l.c. (1992).
Silene grandiflora (Jacq.) Ohashi & H. Nakai, J. Jap. Bot. 71: 110 (1996), non Franchet (1886).
Type: cultivated in Vienna, Austria, n.v. (W?, lost; perhaps not preserved, in which case Jacquin's illustration would make an appropriate type).

Hedona sinensis Lour., Fl. Cochinch.: 286 (1790), non *Silene chinensis* Hort. ex Bosse, Blumengärt. 3: 445 (?1829, n.v.), ed. 2, 3: 388 (1842) = ?
Type: China, cultivated in Canton, *J. de Loureiro s.n.* (?holo P–LOUR!).

Lychnis grandiflora Jacq. var. *tetrapetala* Séringe in DC., Prodr. 1: 386 (1824).
Type: G?, n.v.

'Speciosa' (large scarlet flowers)

Lychnis speciosa Carr., Rev. Hort. 42: 530 + t. (1871).
Lychnis fulgens var. *speciosa* (Carr.) Siebert & Voss, Vilmorin's Blumengärtn:, ed. 3: 105 (1894).
[*Lychnis grandiflora* var. *gigantea* Hort. ex Siebert & Voss, l.c., nom. in synon.]
[*Lychnis japonica speciosa* Hort. ex Siebert & Voss, l.c., nom. in synon.]
Lychnis coronata var. *speciosa* (Carr.) L. Bailey, Cyclop. Am. Hort. 2: 956 (1900).
Type: Cultivated in France from seeds sent from Yokohama, Japan, and raised by Fleuriste, n.v. (?not preserved, in which case the plate would be an 'iconotype').

'Sieboldii' (flowers white)

Lychnis sieboldii Van Houtte ex Planchon, Fl. Serres 10: 31 (1835); Regel, Gartenfl. 12: 82, t. 391 fig. 5 (1863); Huxley, l.c. (1992).
[*Lychnis grandiflora* var. *alba* Siebold ex Planchon, l.c., nom. in synon.; Bois, Dict. Hort.: 792 (1893–9), nom. nud.]
Lychnis fulgens var. *sieboldii* (Planchon) Nichols., t.c.: 306; t. 490 (1885).
Lychnis grandiflora var. *sieboldii* (Planchon) Siebert & Voss, l.c.
Lychnis coronata var. *sieboldii* (Planchon) L. Bailey, l.c.
Type: cultivated in Belgium, n.v., probably not preserved, in which case the plate would be 'iconotype'. (N.B. There survives a Siebold sheet of a wild-collected plant, but without locality — *P.F. von Siebold*, P!).

c. Silene banksia Haageana Group

(Crosses between *'L. fulgens'* (i.e. a plant in the Senno Group) and a white-flowered cultivar ('Sieboldii') in the Coronata Group, and offspring through selfing.)

Lychnis × *haageana* Benary ex Lem., Ill. Hort. 6: ad t. 195 (Jan 1859); Regel, Gartenfl. 12: 82, t. 391, figs. 3, 4 (1863); Planchon, Fl. Serres Il, 12: t. 2322 (1876); Turrill in Curtis, Bot. Mag.[178] n.s. t. 314 (1958); Huxley, l.c.(1992).
Lychnis fulgens Fischer ex Spreng. var. *haageana* (Lem.) Nicholson, Ill. Dict. Gard. 2: 306 + t. 489 (1885).
Lychnis grandiflora Jacq. var. *haageana* (Lem.) Bois, Dict. Hort.: 792, t. 554 (1893–9).
Type (lectotype [icon], chosen here): 'Lychnis Haageana', Illust. Hort.: t. 195 (1859).

Named cultivars include:

'Hybrida' (flowers red)

Hortus Third: 688 (1976); Huxley, l.c. (1992).
? *Lychnis haageana* var. *hybrida* Hort. ex Rodigas, Bull. Arbor. Belge 1897: 105, t. 15.

'Salmonea' (flowers salmon pink)

Hortus Third: 688 (1976); Huxley, l.c. (1992).

In the last century, at least, there were also '*Lychnis fulgens* var. *Haageana grandiflora* Hort.' and 'var. *Haageana nana* Hort.' (Nichols. & Mottet, Dict. Prat. Hort. 3: 212 (1895–6)).

Conclusion: *'Lychnis'* in Australia

The plants in cultivation formerly referred to as *Lychnis fulgens*, *L.* × *haageana*, etc., can therefore be referred to simply as *Silene banksia*, named cultivars as *S. banksia* 'Sieboldii' and *S. banksia* 'Grandiflora', for example.

Although grown in New South Wales, no form of *S. banksia* is known to be naturalized, though, of species recently referred to *Lychnis*, both *S. chalcedonica* (L.) E. Krause and *S. coronaria* (L.) Clairv. (Mediterranean to C Asia) have become so. Other species cultivated in Australia and lately referred to *Lychnis* are *Silene flos-cuculi* (L.) Clairv. (Europe), *S. flos-jovis* (L.) Greuter & Burdet (European Alps), *S. suecica* (Lodd.) Greuter & Burdet (*L. alpina* L. Europe, NE N America), and *S. viscosa* (L.) Pers. (Eurasia).

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